

Amendments to the Specification

The additions have been indicated by underlining (underlining). The deletions have been indicated by strikethrough (~~striethrough~~).

Please replace the paragraph which spans page 5 paragraph 7 through page 6 paragraph 1 with the following amended paragraph:

In a preferred embodiment of the present invention, the proteasome inhibitor is selected from a group comprising:

- a) naturally occurring proteasome inhibitors comprising:
peptide derivatives which have a C-terminal epoxy ketone structure, β -lactone-derivatives, aclacinomycin A, lactacystin, clastolactacystein;
- b) synthetic proteasome inhibitors comprising:
modified peptide aldehydes such as N-carbobenzoxymethyl-L-leucyl-L-leucyl-L-leucinal (also referred to as MG132 or ZLLL), or the boronic acid derivative of MG232, N-carbobenzoxymethyl-Leu-Nva-H (also referred to as MG115), N-acetyl-L-leucyl-L-leucyl-L-norleucinal (also referred to as LLnL), N-carbobenzoxymethyl-Ile-Glu(OBzl)-Ala-Leu-H (also referred to as PS1) [SEQ ID NO:1];
- c) peptides comprising:
an α,β -epoxyketone-structure, vinyl-sulfones such as, carbobenzoxymethyl-L-leucyl-L-leucyl-L-leucyl-vinyl-sulfone or, 4-hydroxy-5-iodo-3-nitrophenylacetyl-L-leucyl-L-leucyl-L-leucyl-vinyl-sulfone (NLVS);
- d) Glyoxal- or boric acid residues such as: pyrazyl-CONH(CHPh)CONH(CHisobutyl)B(OH)₂ and dipeptidyl-boric-acid derivatives;

- e) Pinacol-esters such as: benzyloxycarbonyl(Cbz)-Leu-leuboro-Leu-pinacol-ester.

Please replace paragraph 2 on page 6 with the following amended paragraph:

In a preferred embodiment of the present invention, the proteasome inhibitor is selected from a group comprising PS-314 as a peptidyl-boric-acid derivative which is N-pyrazinecarbonyl-L-phenylalanine-L-leucine-boric acid ($C_{19}H_{25}BN_4O_4$); PS-519 as a β -lactone- and a lactacystin-derivative which is 1R-[1S, 4R, 5S]-1-(1-hydroxy-2-methylpropyl)-4-propyl-6-oxa-2-azabicyclo[3.2.0]heptane-3,7-dione ($C_{12}H_{19}NO_4$); PS-273 (morpholino-CONH-(CH-naphthyl)-CONH-(CH-isobutyl)-B(OH)₂) and its enantiomer; PS-293; PS-296 (8-quinolyl-sulfonyl-CONH-(CH-naphthyl)-CONH-(CH-isobutyl)-B(OH)₂); PS-303 (NH₂(CH-naphthyl)-CONH-(CH-isobutyl)-B(OH)₂); PS-321 as (morpholino-CONH-(CH-naphthyl)-CONH-(CH-phenylalanine)-B(OH)₂); PS-334 (CH₃-NH-(CH-naphthyl)-CONH-(CH-isobutyl)-B(OH)₂); PS-325 (2-quinol-CONH-(CH-homo-phenylalanine)-CONH-(CH-isobutyl)-B(OH)₂); PS-352 (phenylalanine-CH₂-CH₂-CONH-(CH-isobutyl)-B(OH)₂); PS-383 (pyridyl-CONH-(CH₂F-phenylalanine)-CONH-(CH-isobutyl)-B(OH)₂); PS-341; and PS-1 Z-Ile-Glu(OtBu)-Ala-Leu-CHO [SEQ ID NO: 1]; PS-2 [Benzyloxycarbonyl]-Leu-Leu-phenylalaninal or Z-LLF-CHO or Z-Leu-Leu-Phe-CHO PS-1; PS-519 as a β -lactone- and a lactacystin-derivative which is 1R-[1S, 4R, 5S]-1-(1-hydroxy-2-methylpropyl)-4-propyl-6-oxa-2-azabicyclo[3.2.0]heptane-3,7-dione ($C_{12}H_{19}NO_4$); epoxomicin ($C_{28}H_{86}N_4O_7$) and eponemycin ($C_{20}H_{36}N_2O_5$).

Please replace paragraph 2 on page 7 with the following amended paragraph:

In just another preferred embodiment, the proteasome inhibitor is selected from a group comprising Z-Leu-Leu-Leu-al (MG132), Z-Ile-Glu(OtBu)-Ala-Leu-al (PS-1) [SEQ ID NO: 1], CEP1612, pyrazyl-carbonyl-Phe-Leu-boronate (PS-341), dansyl-Phe-Leu-boronate (DFLB), morpholino-naphthylalanine-Leu-boronate (MG273), NIP-Leu₃-vinylsulfone (NLVS), Tyr-Leu₃-VS [SEQ ID NO: 2], NIP-Leu-Leu-Asn-VS, Ada-

Tyr-Ahx₃-Leu₃-VS [SEQ ID NO: 3], Ada-Lys(bio)-Ahx₃-Leu₃-VS [SEQ ID NO: 4], Ac(Me)-Ile-Ile-Thr-Leu-EX (epoxomicin) [SEQ ID NO: 5], dihydroeponemycin, lactacystin, clasto-lactacystin- β -lactone (omuralide), PS-519, Ac-Leu-Leu-Nle-al (ALLN), 3,4-dichloro-isocoumarin (DCI), 4-(2-aminoethyl)-benzenesulfonyl fluoride (Pefablock SC), TMC-95-A, gliotoxin, (-)epigallocatechin-3-gallate (EGCG), ritonavir, lovastatin, aclacinomicin A (aclarubicin), cyclosporin, wherein Z represents benzyl oxycarbonyl, all represents aldehyde, VS represents vinylsulfone, NIP represents 3-nitro-4-hydroxy-5-iodophenylacetate, and bio represents biotin.

Please replace Table 1 which spans page 5 through page 6 with the following amended table:

Table 1: Sequences of oligonucleotides used in RT-PCR

Oligonucleotide	Sequences
Human eNOS-F	5'-GGCATCACCAGGAAGAAGACC-3' [SEQ ID NO: 6]
Human eNOS-R	5'-TTCACCTCGCTTCGCCATCA-3' [SEQ ID NO: 7]
Human eNOS (TaqMan probe)	5'- TAAAGAAGTGGCCAACGCCGTGAAGATC T-3' [SEQ ID NO: 8]
Human HPRT-F	5'-AGTCTGGCTTATATCCAACACTTCG-3' [SEQ ID NO: 9]
Human HPRT-R	5'-GACTTTGCTTTCCTTGGTCAGG-3' [SEQ ID NO: 10]
Human HPRT (TaqMan probe)	5'-TTTCACCAGCAAGCTTGCGACCTTGA -3' [SEQ ID NO: 11]
Bovine eNOS-F	5'- TTTACCATAAGAGACTGGACCAGAAGTT-

	3' <u>[SEQ ID NO: 12]</u>
Bovine eNOS-R	5 '-ATTGACAGCACTGGCTTAGGCA-3'
	<u>[SEQ ID NO: 13]</u>
Bovine HPRT-F	5 '-GCTATAAGTTCTTTGCCGACCTGTT-3'
	<u>[SEQ ID NO: 14]</u>
Bovine HPRT-R	5 '-TTCTGTTTCAGTGCTTTGATGTAATCC-
	3' <u>[SEQ ID NO: 15]</u>
Bovine 28S rRNA-F	5'-AGTAGCTGGTTCCCTCCGAAGT -3'
	<u>[SEQ ID NO: 16]</u>
Bovine 28S rRNA-R	5'-TTGCGAGAGCGCCAGCTAT -3'
	<u>[SEQ ID NO: 17]</u>